

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method comprising:

receiving, with a server device, a request from a first client device to download a file to be transmitted as a plurality of packets of data from the server device;

multicasting the plurality of packets of data from the server device to multiple client devices using a first transmission protocol that comprises a non-reliable multicast transmission protocol, wherein the multiple client devices include at least the first client device;

continuing to participate in the multicast download after an error if a file size is unknown and a last packet has not been successfully received; and

requesting, when the first client has completed download of the file, from the server device with a second client device from the multiple client devices packets of data not received by the second client device, wherein in the request utilizes a second transmission protocol that comprises non-multicast reliable protocol, if the file size is known and the total size of the lost packets is less than a pre-selected amount.

2. (Original) The method of claim 1 wherein the multicasting of the plurality of packets comprises multicasting to the multiple clients using a multicast Trivial File Transfer Protocol (TFTP).

3. (Original) The method of claim 1 wherein the reliable protocol comprises a Trivial File Transfer Protocol (TFTP).

4. (Original) The method of claim 1 wherein the download of the file occurs during a pre-boot phase of the first client device.

5. (Original) The method of claim 4 wherein the file comprises a boot image for the first client device.

6. (Original) The method of claim 1 wherein the second client device tracks packet gaps within the requested file and the size of the packet gaps during the multicast of the file.

7. (Currently Amended) An apparatus comprising:
means for receiving , with a server device, a request from a first client device to download a file to be transmitted as a plurality of packets of data from the server device;
means for multicasting the plurality of packets of data from the server device to multiple client devices using a first transmission protocol that comprises a non-reliable multicast transmission protocol, wherein the multiple client devices include at least the first client device;
means for continuing to participate in the multicast download after an error if a file size is unknown and a last packet has not been successfully received; and

means for requesting, when the first client has completed download of the file, from the server device with a second client device from the multiple client devices packets of data not received by the second client device, wherein in the request utilizes a second transmission protocol that comprises reliable protocol, if the file size is known and the total size of the lost packets is less than a pre-selected amount.

8. (Original) The medium of claim 7 wherein the multicasting of the plurality of packets comprises multicasting to the multiple clients using a multicast Trivial File Transfer Protocol (TFTP).

9. (Original) The medium of claim 7 wherein the reliable protocol comprises a Trivial File Transfer Protocol (TFTP).

10. (Original) The medium of claim 7 wherein the download of the file occurs during a pre-boot phase of the first client device.

11. (Original) The medium of claim 10 wherein the file comprises a boot image for the first client device.

12. (Original) The medium of claim 7 wherein the second client device tracks packet gaps within the requested file and the size of the packet gaps during the multicast of the file.

13. (Currently Amended) A system comprising:

one or more processors;

a network interface coupled with the one or more processors; and

computer-readable medium coupled with the one or more processors having stored thereon instructions that, when executed, cause one or more processors to receive, with a server device, a request from a first client device to download a file to be transmitted as a plurality of packets of data from the server device, continue to participate in the multicast download after an error if a file size is unknown and a last packet has not been successfully received, and multicast the plurality of packets of data from the server device to multiple client devices using a first transmission protocol that comprises a non-multicast non-reliable multicast transmission protocol, wherein the multiple client devices include at least the first client device, requesting, when the first client has completed download of the file, from the server device with a second client device from the multiple client devices packets of data not received by the second client device, wherein in the request utilizes a second transmission protocol that comprises reliable protocol, if the file size is known and the total size of the lost packets is less than a pre-selected amount.

14. (Original) The system of claim 13 wherein the multicasting of the plurality of packets comprises multicasting to the multiple clients using a multicast Trivial File Transfer Protocol (TFTP).

15. (Original) The system of claim 13 wherein the reliable protocol comprises a Trivial File Transfer Protocol (TFTP).

16. (Original) The system of claim 13 wherein the download of the file occurs during a pre-boot phase of the first client device.

17. (Previously Presented) The system of claim 13 wherein the file comprises a boot image for the first client device.

18. (Original) The system of claim 13 wherein the second client device tracks packet gaps within the requested file and the size of the packet gaps during the multicast of the file.